

ABSTRACT OF THE DISCLOSURE

A road recognition apparatus estimates road parameters of a road model equation by processing a forward road image of a vehicle. A processor sets a series of windows along a road white line (or lane marker) on the forward road image, and calculates a candidate straight line segment likely to be a white line in each window. The processor further checks an accuracy in position of a candidate white line in each window. The processor estimates the road parameters from the image coordinates of the candidate white line in each or the window higher in the accuracy, and estimates the road parameters exclusive of a vehicle lateral displacement from the gradient of candidate white line in each or the window lower in the accuracy.